

What is claimed is:

1. An antistatic film with a surface resistivity of no greater than $10^{13} \Omega/\square$, comprising a metal oxide and conductive ultrafine particle mixed layer formed on the surface of a film.
2. An antistatic film according to claim 1, wherein the metal oxide and conductive ultrafine particle mixed layer comprises the metal of the metal oxide and the conductive ultrafine particles in a weight ratio (metal/conductive ultrafine particles) of 0.01-0.1.
3. An antistatic film according to claim 1, wherein the film is a polyimide film.
4. An antistatic film according to claim 3, wherein the polyimide film is obtained from a tetracarboxylic acid component and a diamine component.
5. An antistatic film according to claim 4, wherein the tetracarboxylic acid component is 3,3',4,4'-biphenyltetracarboxylic dianhydride.
6. An antistatic film according to claim 1, wherein the metal oxide is an aluminum oxide.
7. An antistatic film according to claim 1, wherein the conductive ultrafine particles have a mean particle size of no greater than $0.1 \mu\text{m}$.
8. An antistatic film according to claim 1, wherein the conductive ultrafine particles are ITO ultrafine particles.
9. An antistatic film according to claim 1, wherein the mixed layer is formed by a coating method.
10. A process for manufacture of an antistatic film according to claim 1, which comprises coating the surface of a self-supporting film, obtained by casting and drying a solution of a film-forming heat-resistant resin precursor, with a mixture obtained by uniformly combining a metal compound which converts to a metal oxide upon heating, conductive ultrafine particles and a solvent, and then heating it to dryness, removing the solvent and

cyclizing the heat-resistant resin precursor.

11. A process for manufacture of an antistatic film according to claim 10, wherein the metal compound which converts to a metal oxide upon heating is an organic
5 aluminum compound.

12. A process for manufacture of an antistatic film, which comprises coating the surface of a self-supporting film, obtained from a polyimide precursor solution, with a mixture comprising a metal compound
10 which converts to a metal oxide upon heating, conductive ultrafine particles and a solvent, and then drying it to obtain a dry film with a metal compound and conductive ultrafine particle mixed layer, and heating the dry film at a temperature of 420°C or above to complete imide
15 cyclization, thereby forming on the film surface a metal oxide and conductive ultrafine particle mixed layer having a surface resistance value of no greater than 10^{13} Ω/\square .